

AUG 29 2006

PTO/SB/21 (09-04)

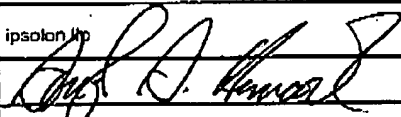
Approved for use through 07/31/2008. OMB 0551-0031

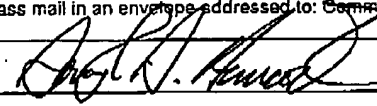
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/816,684	
	Filing Date	April 1, 2004	
	First Named Inventor	Robert C. Otterson	
	Art Unit	1746	
	Examiner Name	Rita Ramesh Patel	
Total Number of Pages In This Submission	28	Attorney Docket Number	1360-001/dch

ENCLOSURES (Check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input checked="" type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Other Enclosure(s) (please identify below):
Remarks -Appeal Brief; -Credit Card Authorization Form		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT			
Firm Name	ipsolon llp		
Signature			
Printed name	Douglas D. Hancock		
Date	August 29, 2006	Reg. No.	35889

CERTIFICATE OF TRANSMISSION/MAILING			
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:			
Signature			
Typed or printed name	Douglas D. Hancock	Date	August 29, 2006

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

AUG 29 2006

PTO/SB/17 (01-08)

Approved for use through 07/31/2005. OMB 0551-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995 no persons are required to respond to a collection of information unless it displays a valid OMB control number

Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4019).

FEE TRANSMITTAL
For FY 2006☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$)

250

Complete if Known

Application Number	10/816,664
Filing Date	April 1, 2004
First Named Inventor	Robert C. Otterson
Examiner Name	Rita Ramesh Patel
Art Unit	1746
Attorney Docket No.	1360-001/ddh

METHOD OF PAYMENT (check all that apply)☐ Check ☒ Credit Card ☐ Money Order ☐ None ☐ Other (please identify):☒ Deposit Account Deposit Account Number: 500241 Deposit Account Name: ipsolon llp

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☐ Credit any overpayments

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

FEE CALCULATION (All the fees below are due upon filing or may be subject to a surcharge.)**1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES**Fee Description**

Each claim over 20 (including Reissues)

Each independent claim over 3 (including Reissues)

Multiple dependent claims

Fee (\$)	Small Entity Fee (\$)
50	25
200	100
360	180

Total Claims Extra Claims Fee (\$)

- 20 or HP = x =

HP = highest number of total claims paid for, if greater than 20.

Indep. Claims Extra Claims Fee (\$)

- 3 or HP = x =

HP = highest number of independent claims paid for, if greater than 3.

Multiple Dependent Claims
Fee (\$)**3. APPLICATION SIZE FEE**

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets Extra Sheets Number of each additional 50 or fraction thereof Fee (\$)

- 100 - / 50 = (round up to a whole number) x =

4. OTHER FEE(S)

Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): (a) Appeal Brief (\$250)

Fees Paid (\$)

\$250

SUBMITTED BY

Signature

Registration No. 35889
(Attorney/Agent)

Telephone 641-549-4942

Name (Print/Type) Douglas D. Hancock

Date August 29, 2006

This collection of information is required by 37 CFR 1.138. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Attorney Ref. No: 1360-001/ddh

**IN THE U.S. PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS AND INTERFERENCES**

**RECEIVED
CENTRAL FAX CENTER
AUG 29 2006**

In re Application of: Robert Otterson

Filed: April 1, 2004

Application No.: 10/816,664

Examiner: Rita Ramesh Patel

Group Art Unit: 1746

For: *Flat Surface Washing Apparatus*

APPEAL BRIEF

(37 CFR § 41.37)

COMMISSIONER FOR PATENTS:

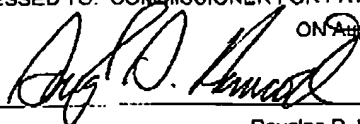
Sir:

This brief is in furtherance of the Notice of Appeal filed July 10, 2006 in connection with the captioned application, and date stamped as received by the Patent Office on July 13, 2006. The \$250 fee required under 37 CFR § 41.20(b)(2) is enclosed herewith.

CERTIFICATE OF TRANSMISSION/MAILING

I HEREBY CERTIFY THAT THIS CORRESPONDENCE AND THE DOCUMENTS REFERRED TO AS BEING ATTACHED OR ENCLOSED HERewith ARE BEING FACSIMILE TRANSMITTED TO THE USPTO OR DEPOSITED WITH THE UNITED STATES POSTAL SERVICE WITH SUFFICIENT POSTAGE AS FIRST CLASS MAIL IN AN ENVELOPE ADDRESSED TO: COMMISSIONER FOR PATENTS, P.O. BOX 1450, ALEXANDRIA, VA 22313-1450

ON August 29, 2006



Douglas D. Hancock

08/29/2006 TL0111 00000054 10016664

01 FC:2402

250.00 OP

Attorney Ref. No: 1360-001/ddh

CONTENTS

1.	Real Party in Interest	3
2.	Related Appeals and Interferences	4
3.	Status of Claims	5
4.	Status of Amendments	6
5.	Summary of Claimed Subject Matter	7
6.	Grounds of Rejection to be Reviewed on Appeal	9
7.	Argument	10
8.	Claims Appendix	20
9.	Evidence Appendix	24
10.	Related Proceedings Appendix	25

Attorney Ref. No: 1360-001/ddh

1. Real Party in Interest

The real party in interest is Robert C. Otterson

Attorney Ref. No: 1360-001/ddh

2. Related Appeals and Interferences

There are no related appeals or interferences.

Attorney Ref. No: 1360-001/ddh

3. Status of Claims

Claims 1 through 15 are rejected and are the claims on appeal.

Claims 16 - 20 are withdrawn.

Attorney Ref. No: 1360-001/ddh

4. Status of Amendments

No claim amendments have been filed subsequent to the final office action that was mailed June 19, 2006.

Attorney Ref. No: 1360-001/ddh

5. Summary of Claimed Subject Matter

The invention claimed herein is a high pressure washer device that is mounted on a wheeled chassis. The device is especially useful for washing flat surfaces such as tennis courts. An engine and high pressure pump are mounted onto the wheeled chassis. High pressure water flows to a rotating wand and nozzle assembly on the chassis so that as the chassis is moved along a linear path, high pressure water is sprayed onto the underlying surface.

Independent claim 1 is directed to an apparatus for cleaning a surface comprising a wheeled chassis (e.g., Fig. 1, reference numbers 12, 18; specification at pages 4, 5), an engine (e.g., Fig. 1, reference number 14; specification at page 5) and high pressure pump (e.g., Fig. 1, reference number 16; specification at page 5) mounted to the chassis. The pump has an inlet e.g., (Fig. 1, reference number 30; specification at page 5) and a high pressure outlet (e.g., Fig. 1, reference number 32; specification at page 5). A rotary valve (e.g., Fig. 3, reference number 50; specification at page 7) is mounted to the chassis and is fluidly connected to the high pressure outlet (e.g., Fig. 3 and specification at page 7). At least two wands (e.g., Figs. 2 and 3, reference numbers 58, 60; specification at pages 7, 8) are fluidly connected to the rotary valve so that rotation of the valve causes the wands to rotate (e.g., specification at page 9). Each wand has a nozzle (e.g., Fig. 2, reference numbers 62, 64; specification at pages 7, 8) mounted to the wand and oriented so that high pressure water is sprayed from the nozzles toward the surface (e.g., Fig 3; specification at page 9).

Independent claim 9 includes many of the elements just described, and also high pressure water distribution means (e.g., specification at pages 6 through 9) connected to the rotary valve for directing water sprayed from nozzles in a 360° rotary spray pattern (e.g., Fig. 5; specification at page 9). Claim 9 also calls out diffuser plate means (e.g., Figs. 2 and 3, reference numbers 70, 72; specification at page 8) for interrupting the rotary spray pattern in at least part of the 360° rotary spray pattern e.g., (Figs. 3 and 4; specification at pages 9, 10).

Dependent claim 2 specifies that the rotary valve is capable of causing the nozzles to rotate in a circular pattern so that water is sprayed from the nozzle in a

Attorney Ref. No: 1360-001/ddh

path (e.g., specification at page 7). Dependent claim 3 requires that the path is circular (e.g., Fig. 5). Dependent claims 4 and 11 recite the diffuser plates (70, 72) mounted to the chassis between the nozzles and the surface such that the diffuser plates occlude at least a portion of the path (e.g., Figs. 3 and 4; specification at page 8, 9).

Dependent claim 12 recites that each diffuser plate of the diffuser plate means interrupts the rotary spray pattern through an arc of at least about 45° (specification at page 11). Claim 13 specifies that the chassis is configured for movement along a linear path and each diffuser plate interrupts the rotary spray pattern at opposite lateral sides of the rotary spray pattern (e.g., Fig. 4; specification at pages 9, 10).

Attorney Ref. No: 1360-001/ddh

6. Grounds of Rejection to be Reviewed on Appeal

Claims 1 – 15 are rejected under 35 USC § 103(a) as being unpatentable over Chayer (US Patent No. 5,029,758) and further in view of Straiton (US Patent No. 5,898,970).

Attorney Ref. No: 1360-001/ddh

7. Argument

The well-established test for a *prima facie* case of obviousness requires, among other things, that the prior art references teach or suggest all of the claim limitations. The MPEP, in section 2143, sets forth what is needed for establishing a *prima facie* case of obviousness for rejecting claims under 35 USC § 103. The pertinent portion of that section is reproduced here:

"To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)."

The references cited by the Examiner fail to meet each of these criteria.

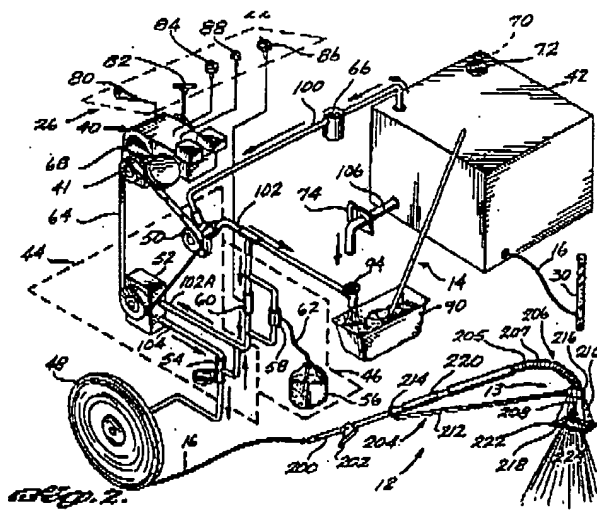
I. The References Do not Teach all Claim Limitations

a. Independent Claim 1

Independent claim 1 requires among other things (a) a rotary valve mounted to the chassis, (b) at least two wands connected to the rotary valve so that rotation of the valve causes the wands to rotate, and (c) a nozzle mounted to each wand.

Chayer's portable car washing system has an engine and pump mounted to a wheeled chassis, as shown in Fig. 2 from Chayer, which is reproduced on the following page. However, Chayer does not include (a) a rotary valve mounted to the chassis; (b) two wands connected to the rotary valve so that rotation of the valve causes the wands to rotate; and (c) a nozzle mounted to each wand so that water is sprayed from the nozzles toward the surface.

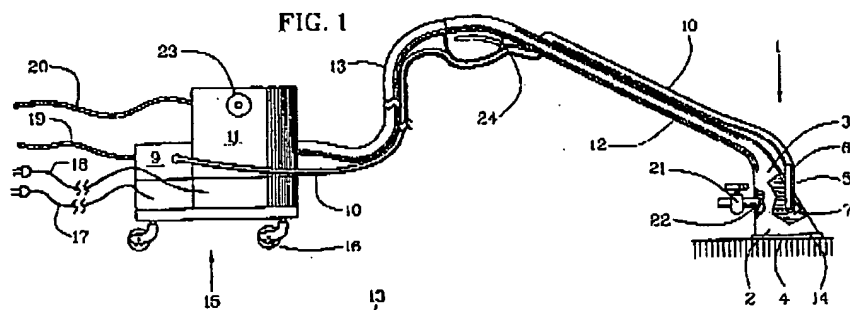
Attorney Ref. No: 1360-001/ddh



Chayer's wand 12 is a handheld wand that is separated from the chassis, although connected to the chassis through a fluid connection between the wand and the chassis. Chayer does not describe a rotary valve at all, so Chayer cannot describe or teach a wand cannot to a rotary valve. Accordingly, rotation of a valve

cannot cause Chayer's wand to rotate.

Like Chayer, Straiton fails to describe many of the structural features called out in the claims of the present invention. Straiton's Fig. 1 is reproduced



above. Like Chayer, Straiton also relies upon a handheld wand that is connected to a water and vacuum source. Straiton does not describe a rotary valve, let alone a rotary valve with wands connected to it, and with nozzles connected to the wands. Straiton does describe a rotary spray nozzle (column 5, lines 1 – 5). However, claim 1 requires that the rotary valve is mounted to the chassis and that two wands are connected to the rotary valve. In the Straiton system a rotary spray nozzle would be mounted to the water blast nozzle 5, which of course is not mounted to the chassis and cannot be rotated as the wands rotate, as required by claim 1.

Attorney Ref. No: 1360-001/ddh

The Examiner argues that Chayer's wand and hose assembly read on the wand and nozzle of claim 1. However, this argument loses track of the language of the claim, which is structurally specific and requires "a rotary valve mounted to the chassis and fluidly connected to the high pressure outlet and having at least two wands connected to the rotary valve so that rotation of the valve causes the wands to rotate...". There is no structure in Chayer that even remotely suggests the claimed structure, let alone any structure that reads on the claim. Even if we accepted that Straiton's rotary valve could be "integrated" with Chayer's cleaning wand, as suggested by the Examiner, there still would be no connection that would cause the wands to rotate as the valve rotates; both Chayer and Straiton require that the operator manually move the wand. Moreover, Chayer does not teach a nozzle mounted to each wand, as claimed.

In combining Straiton with Chayer the Examiner urges that Straiton's water blast nozzle is "capable of the same functions as applicant's claimed spray wand." Regardless of whether or not that is true, which is not at all clear, Straiton does not teach or suggest a rotary valve mounted to a chassis, wands connected to the rotary valve, and nozzles mounted to each wand. A rotary spray nozzle such as that disclosed by Straiton is structurally very different from the structure called out in the claims of the present invention where wands are connected to the valve and rotation of the wands causes the nozzles to rotate.

Claim 1 requires that rotation of the rotary valve causes the wands to rotate. The Examiner argues:

"Straiton's nozzle plug 35 is a spray adjustor that can adjust the pressure and area of a liquid jet emitted therefrom the outlet orifice 8; therefore, the nozzle plug can produce a rotation of the liquid sprayed and cause the wand to rotate. As the pressure is increased, the rotation movements of the spraying nozzle may similarly to increase in occurrence."

(June 19 Office action, page 6, emphasis added). Applicant is at a loss to understand the basis for the portions of the Examiner's argument quoted in italics. Straiton does not describe or suggest that the nozzle plug can produce a rotation of the liquid and cause the wand to rotate. Indeed, if that were the case

Attorney Ref. No: 1360-001/ddh

the operator of the Straiton device would be in for considerable difficulty since Straiton relies up a handheld wand. Nor does Straiton suggest that an increase in pressure causes rotational movements of the nozzle to increase. The Examiner has apparently created these assessments of Straiton's structure and operation out of whole cloth. Most strikingly, the Examiner's combination of selected elements from the references and supposition about how they operate cannot render the claim obvious because Straiton's hand held wand does not and cannot rotate as a result of fluid being sprayed from the nozzle at the end of the wand.

In sum, neither Chayer nor Straiton describe or suggest a rotary valve mounted to the chassis, and neither describes nor suggests wands connected to the valve. Accordingly, neither reference can suggest that rotation of the valve causes rotation of the wands. There is nothing in either reference or in the "common knowledge" that would suggest modification of the references to arrive at the invention defined in claim 1. Since the specific structural limitations found in claim 1 are not disclosed by the art, the art does not meet the requirement of teaching or suggesting all of the claim limitations.

b. Independent Claim 9

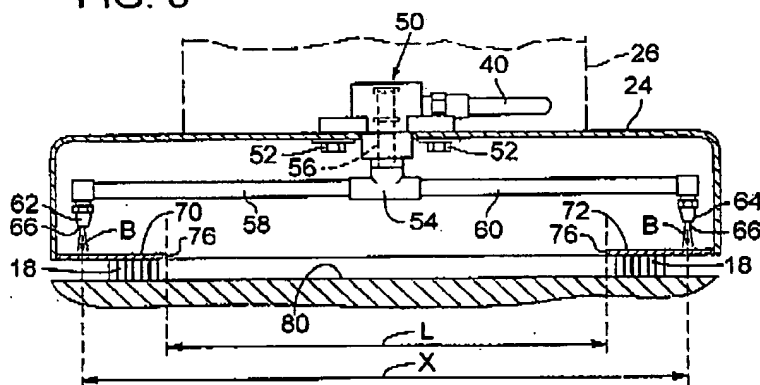
Independent claim 9 is distinguishable from both Chayer and Straiton for many of the same reasons noted above. Further, claim 9 includes water distribution means connected to the rotary valve for directing water sprayed from a pair of nozzles in a 360° rotary spray pattern toward a surface, and diffuser plate means for interrupting the rotary spray pattern in at least part of the 360° rotary pattern. As noted, the references cited by the Examiner do not disclose a rotary valve, let alone a valve that is associated with any structure that is capable of rotating a pair of nozzles in a 360° rotary spray pattern (neither reference discloses more than one nozzle, either). Moreover, claim 9's diffuser plate means operate to interrupt the spray pattern in at least part of the 360° rotary pattern.

Page 13 of 25

Attorney Ref. No: 1360-001/ddh

Fig. 3 from the subject application is reproduced below. Briefly described, a rotary valve 50 is mounted to the chassis and the wands 58 and 60 rotate as the rotary valve rotates. Nozzles 62 and 64 are mounted to the wands and direct a spray of water toward the underlying surface 80 in a rotary pattern. Diffuser plates 70 and 72 are mounted to the chassis between the nozzles and the surface such that the diffuser plates occlude a portion of the spray pattern of water as it is sprayed out of the nozzles.

FIG. 3



As noted above with respect to claim 1, neither reference teaches a rotary valve mounted to the chassis. Neither reference teaches high pressure water distribution means *connected to the rotary valve for directing water sprayed from a pair of nozzles in a 360° rotary spray pattern toward a surface*. Claim 9 is allowable for these distinctions alone.

But claim 9 also calls out diffuser plate means for interrupting the rotary spray pattern in at least part of the 360° spray pattern. The Examiner says that the spray shield 210 from Chayer is capable of occluding fluid flow. Applicant disagrees. The diffuser plates of the present invention are detailed in Figs. 2 and 3 (structures 70 and 72) and are described in detail in the specification at pages 8 through 12. In a nutshell, as the wands and nozzles rotate the nozzles pass over the diffuser plates for a portion of the rotational path, and accordingly, the diffuser plates interrupt or occlude at least a portion of the spray path. Stated another way, the diffuser plates block the spray from the nozzles from impinging

Attorney Ref. No: 1360-001/ddh

directly on the underlying surface. As a result of the diffuser plates, the otherwise circular spray pattern of water sprayed onto the surface is truncated where the water sprayed from the nozzles hits the diffuser plates rather than the surface (see, e.g., Fig. 4 and the accompanying description). The purpose for this structure is described in the specification (see, e.g., page 10, last paragraph), and in brief, protects the underlying surface from damage.

Chayer's spray shield 210 is not structurally equivalent to the claimed diffuser plates, and does not provide the same function. Even if for the sake of argument we were to agree with the Examiner's position that the spray shield interrupts the spray pattern, the spray shield cannot interrupt the spray pattern in at least a portion of a 360° path. If we continue with the Examiner's position, in order to get Chayer's spray to meet the limitation of a 360° spray path, the operator would need to manually rotate the hand-held wand (which in itself distinguishes the claimed invention from Chayer). Next, the spray shield would somehow need to interrupt the spray pattern in a portion of that path. But Chayer specifically shapes his spray shield similarly to the spray pattern so that the spray shield *assists* in directing the spray onto the car, not so that a portion of the spray is occluded (see, e.g., Chayer at column 7, lines 25 through 37). As such, Chayer actually teaches away from use of a diffuser plate that interrupts part of the spray path. While Chayer's spray shield does reduce overspray (to avoid, for example, inadvertent spraying of adjacent cars), this is not the same as interrupting a portion of the spray path.

For these reasons, independent claim 9 is allowable over Chayer and Straiton.

c. Dependent Claims 2 and 3

Claims 2 and 3 limit claim 1 by adding that the rotary valve causes the nozzles to rotate in circular pattern (claim 2), and so that the path is circular (claim 3). While it is true that an individual holding either of the handheld wands taught by Chayer or Straiton could move them in a circle, that movement would

Attorney Ref. No: 1360-001/ddh

not read on claims 2 or 3 because the basic structural features found in independent claim 1 are not described or suggested by the references. Specifically, manual rotation of Chayer's and / or Straiton's wands by an operator is not the same as the required rotation of the wands by rotation of the rotary valve.

d. Dependent Claims 4, 11, 12, 13

Claim 4 is directed to the diffuser plates described in the specification. The claim requires that the plates are mounted to the chassis between the nozzles and the surface so that the plates occlude at least a portion of the path. Again, as the wands and nozzles rotate the nozzles pass over the diffuser plates for a portion of the rotational path, and accordingly, the diffuser plates occlude at least a portion of the spray path. As a result of the diffuser plates, the otherwise circular spray pattern of water sprayed onto the surface is truncated where the water sprayed from the nozzles hits the diffuser plates rather than the surface.

The Examiner cites The American Heritage Dictionary of the English Language in arguing that Chayer's spray shield occludes a portion of the spray path. Applicant and the Examiner do not disagree on the definition of the word "occlude" (i.e., the Merriam-Webster Online Dictionary defines "occlude" as "to close up or block off"). This is consistent with the specification, where the diffuser plates are described as occluding a portion of the spray path (see, e.g., specification at page 8), and preventing fluid from the nozzles from directly impinging on the surface (see, e.g., specification at page 10 and Fig. 3).

However, Applicant does disagree with the Examiner's tortured interpretation of Chayer's spray shield, which cannot and does not occlude any spray from the nozzle—it directs the spray to the intended target. Here is how Chayer describes his spray shield:

* * * The spray shield 210 has an opening 218 opposite the base 216, and is substantially larger than the base 216, which permits high-pressure spray from the nozzle 208 to exit the spray shield 210. Preferably, the shape of the spray shield 210 is similar to the

pattern of the spray 224 exiting the nozzle 208. In this manner, the spray shield 210 assists in directing the spray 224 and also substantially reduces any overspray from the nozzle 208. * * *

(Chayer patent, column 7, lines 28 through 34.)

Chayer thus teaches a spray shield that "assists" directing the spray to the intended surface, not a structure that prevents spray from impinging on the surface. Moreover, even if Chayer's spray shield *did* occlude a portion of the spray path, it is not mounted to the chassis, as required by claim 4, but is instead mounted to the end of the wand.

Claim 11 specifies that the diffuser plate means of claim 9 further comprises a pair of plates mounted to the chassis in a position such that the plates lie between the nozzles and the surface. Chayer does not describe or suggest diffuser plates, let alone a pair of such plates mounted to the chassis in a position such that the plates lie between the nozzles and the surface.

Claim 12 specifies that each diffuser plate interrupts the rotary spray pattern through an arc of at least about 45°. Applicant does not understand how Chayer can teach or suggest this limitation.

Finally, claim 13 adds limitations directed to movement of the chassis

along a linear path wherein each diffuser plate interrupts the rotary spray pattern at opposite lateral sides of the rotary spray pattern. This feature is described in the specification at, for example, pages 9 through 10, and is illustrated best with Fig. 4, which is reproduced on the left. From Fig. 4 it may be seen that the spray pattern has been truncated on opposite sides of the rotary path (i.e., the difference between dimensions X and L—the truncation caused by the diffuser plates. No matter how Chayer's or

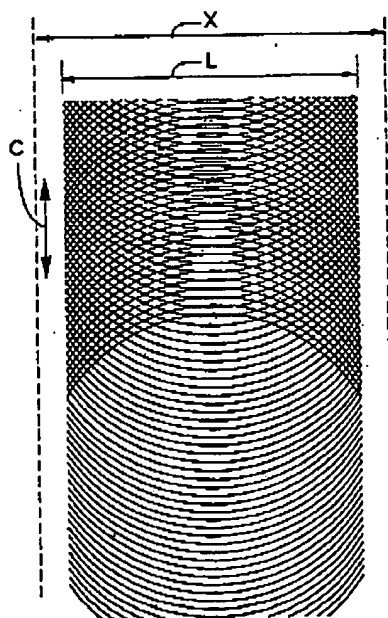


FIG. 4

Attorney Ref. No: 1360-001/ddh

Straiton's nozzles are moved, it would be impossible to create such a truncated spray pattern. The Examiner's rejection of claim 14 is inapposite.

II. There is No Motivation to Combine the References

In this case the Examiner relies on two references that fail to teach all limitations of the claims. There is nothing in these references that provides any motivation that would lead one skilled in the art to which the invention pertains to make the combination. There must be something in the cited references that suggests the desirability of the claimed invention; the suggestion cannot be derived from the specification of the application. Although both references teach devices for spraying fluid out of a hand-held wand, neither teaches the specific combination of elements in the claims.

Even where two references may be amenable to being combined for purposes of making a rejection under § 103, an obviousness rejection cannot be sustained absent a suggestion in the prior art of the desirability of the combination. See, e.g., *In re Mills*, 916 F.2d 680 (Fed. Cir. 1990). In this case even if Chayer and Straiton are combined, there is no suggestion in the references that the invention defined in the independent claims would be desirable.

III. There is No Reasonable Expectation of Success

There is no reasonable expectation that the invention defined in independent claims 1 and 9 would be successful from the combination of Chayer with Straiton. As noted above, neither discloses or suggest the claimed structure. As such, even when the references are combined there are claim limitations that are missing, and on this basis there can be no expectation of success.

Appellant submits that for the reasons discussed above, the criteria set forth above for establishing a *prima facie* case of obviousness under 35 USC §

Attorney Ref. No: 1360-001/ddh

103 have not been met with respect to the independent claims and, therefore, the rejection of claims 1 and 9, and the claims depending therefrom should be reversed.

IV. Summary

In view of the foregoing, appellant respectfully requests reversal of all of the rejections.

Respectfully submitted,



Douglas D. Hancock
Registration No. 35,889

August 29, 2006

ipsolon llp
111 S.W. Columbia
Suite 710
Portland, Oregon 97201
Direct phone: (541) 549-4942

cc: Robert C. Otterson

Attorney Ref. No: 1360-001/ddh

8. Claims Appendix

1. Apparatus for cleaning a surface, comprising:
 - a wheeled chassis;
 - an engine and a high pressure pump mounted to the chassis, the pump having an inlet and a high pressure outlet;
 - a rotary valve mounted to the chassis and fluidly connected to the high pressure outlet and having at least two wands connected to the rotary valve so that rotation of the valve causes the wands to rotate; and
 - a nozzle mounted to each wand and oriented so that high pressure water is sprayed from the nozzles toward the surface.
2. Apparatus according to claim 1 wherein the rotary valve is capable of causing the nozzles to rotate in a circular pattern so that high pressure water is sprayed from the nozzles in a path.
3. Apparatus according to claim 2 wherein the path is circular.
4. Apparatus according to claim 3 including a pair of diffuser plates mounted to the chassis between the nozzles and the surface such that the diffuser plates occlude at least a portion of the path.
5. Apparatus according to claim 1 including a first valve between the high pressure outlet and the rotary valve, said first valve movable from a neutral position in which water flowing therethrough is returned to the high pressure pump, and a second position in which water flowing therethrough is directed to the rotary valve.

Attorney Ref. No: 1360-001/ddh

6. Apparatus according to claim 5 including a second valve fluidly connected to the first valve and a high pressure outlet.
7. Apparatus according to claim 6 wherein when the first valve is in the second position and the second valve is in a second position, water is directed through the high pressure outlet of the second valve.
8. Apparatus according to claim 5 including a pressure regulating valve between the high pressure outlet and the first valve.
9. High pressure washing apparatus, comprising:
 - a wheeled chassis;
 - an engine and a high pressure pump mounted to the chassis, the pump having an inlet and a high pressure outlet;
 - a rotary valve mounted to the chassis and fluidly connected to the high pressure outlet;
 - high pressure water distribution means connected to the rotary valve for directing water sprayed from a pair of nozzles in a 360° rotary spray pattern toward a surface; and
 - diffuser plate means for interrupting the rotary spray pattern in at least part of the 360° rotary spray pattern.
10. The high pressure washing apparatus according to claim 9 wherein the high pressure water distribution means further comprises a pair of opposed wands and a nozzle connected to each of the wands.

Attorney Ref. No: 1360-001/ddh

11. The high pressure washing apparatus according to claim 9 wherein the diffuser plate means comprises a pair of diffuser plates mounted to the chassis in a position such that the plates lie between the nozzles and the surface.

12. The high pressure washing apparatus according to claim 11 in which each diffuser plate interrupts the rotary spray pattern through an arc of at least about 45°.

13. The high pressure washing apparatus according to claim 12 in which the chassis is configured for movement along a linear path and wherein each diffuser plate interrupts the rotary spray pattern at opposite lateral sides of the rotary spray pattern.

14. The high pressure washing apparatus according to claim 9 including valve means for selectively directing high pressure water to the high pressure distribution means of to the pump.

15. The high pressure washing apparatus according to claim 14 including high pressure regulating means for adjusting the pressure of water in the high pressure water distribution means.

16. A method of washing a surface, comprising the steps of:

a) mounting to a wheeled chassis an engine, a pump having a low pressure inlet and a high pressure outlet, and a pair of rotating wands having nozzles mounted in spaced apart positions thereon; and

b) supplying water to the low pressure inlet, pressurizing the water and causing high pressure water to spray from the nozzles in a 360° spray path toward the surface.

Attorney Ref. No: 1360-001/ddh

17. The method according to claim 16 including the step of blocking at least a portion of the 360° spray path so that high pressure water is blocked from directly hitting the surface in the blocked portion.
18. The method according to claim 16 including blocking at least a portion of the 360° path at opposed sides of the path.
19. The method according to claim 18 including blocking the path through an arc of at least about 45° on opposite sides of the path.
20. The method according to claim 19 including blocking the path through an arc of between about 60° and 75° on opposite sides of the path.

Attorney Ref. No: 1360-001/ddh

9. Evidence Appendix

None

Attorney Ref. No: 1360-001/ddh

10. *Related Proceedings Index*

None